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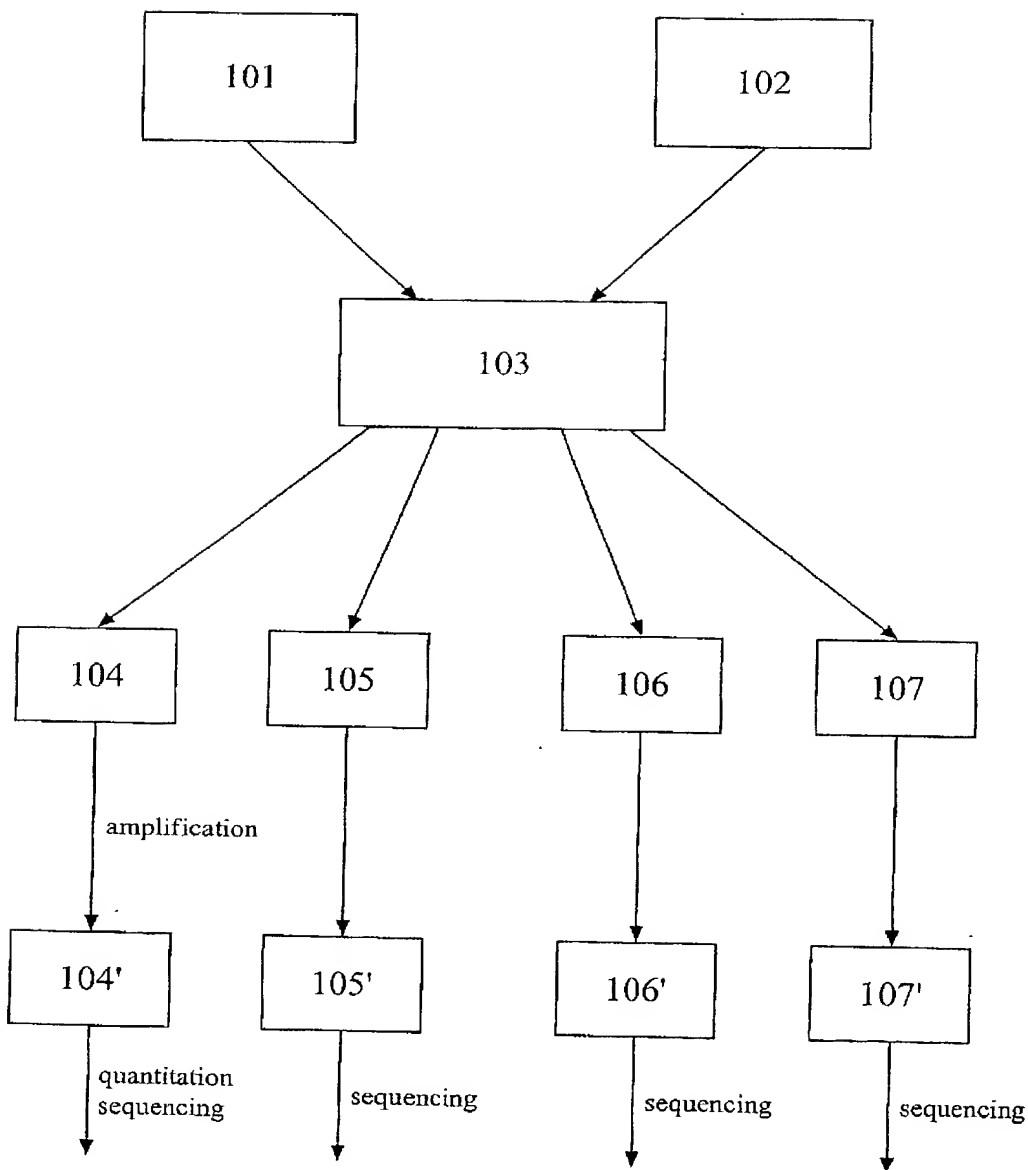


FIG. 1



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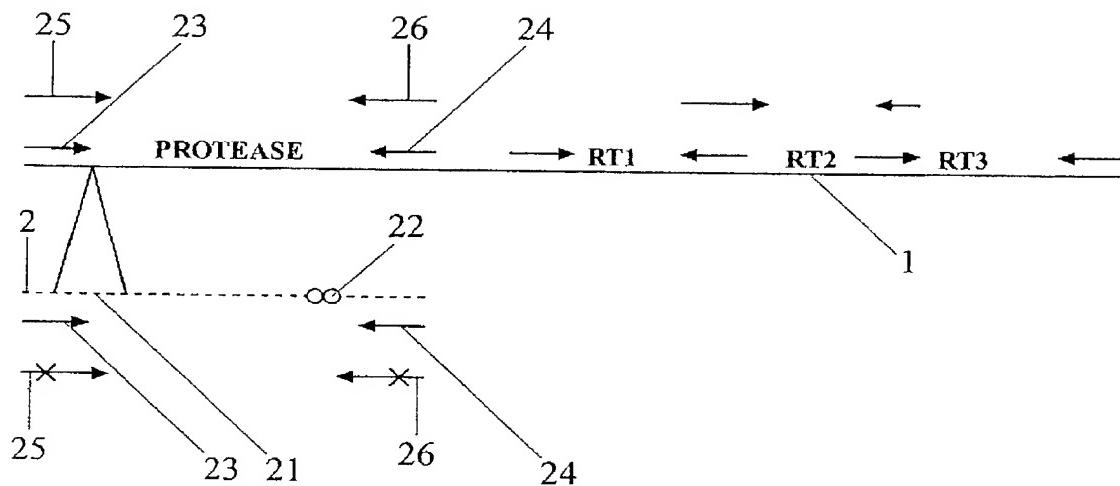


FIG. 2A

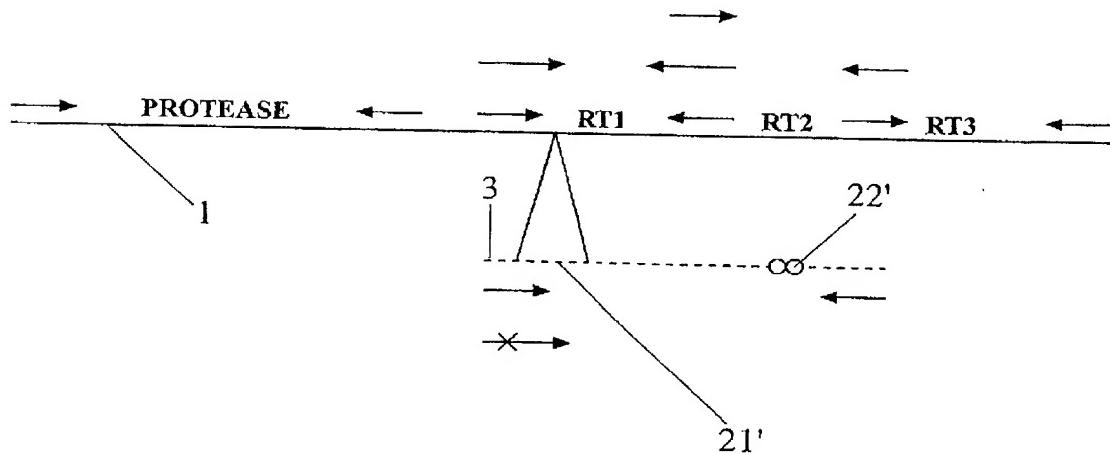
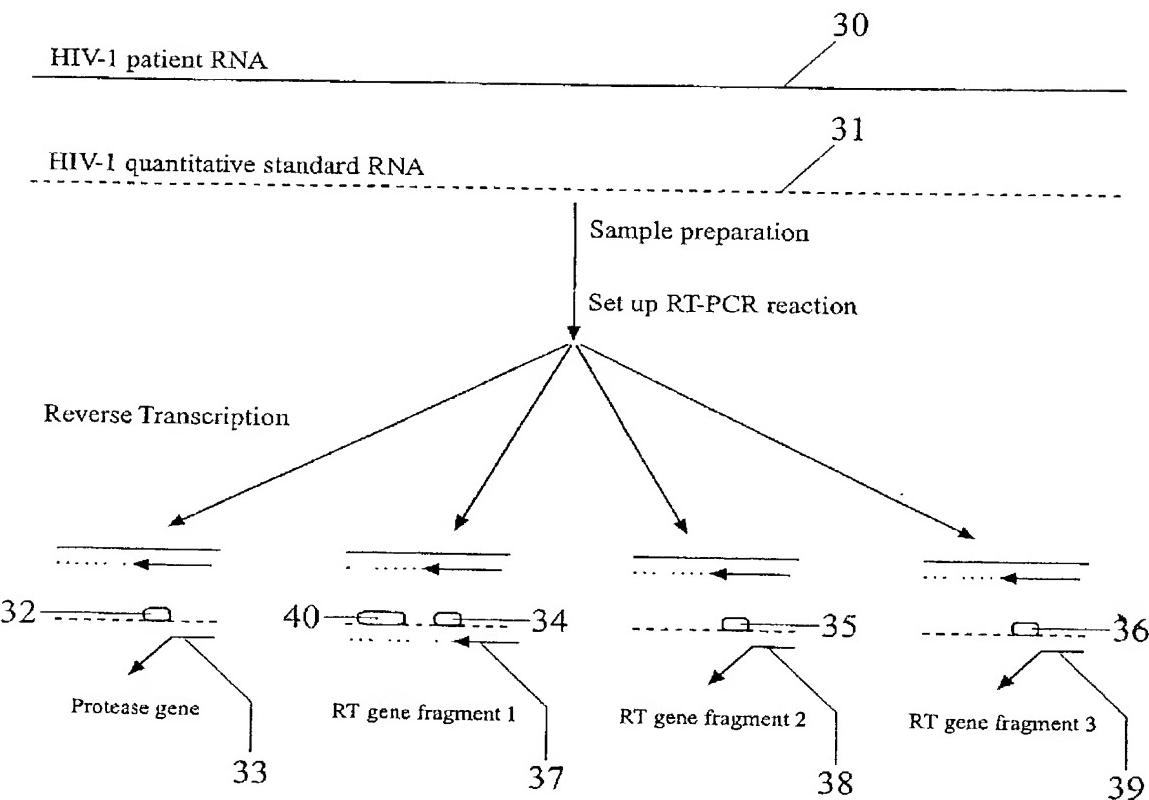
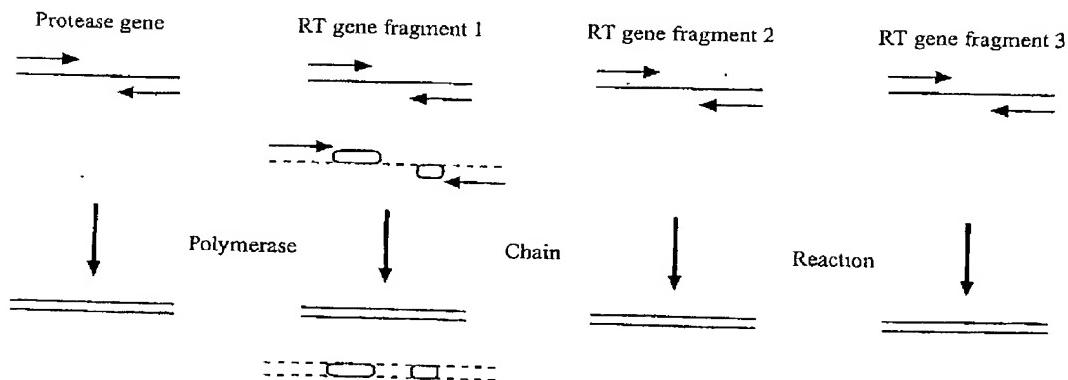


FIG. 2B



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**FIG. 3A****FIG. 3B**



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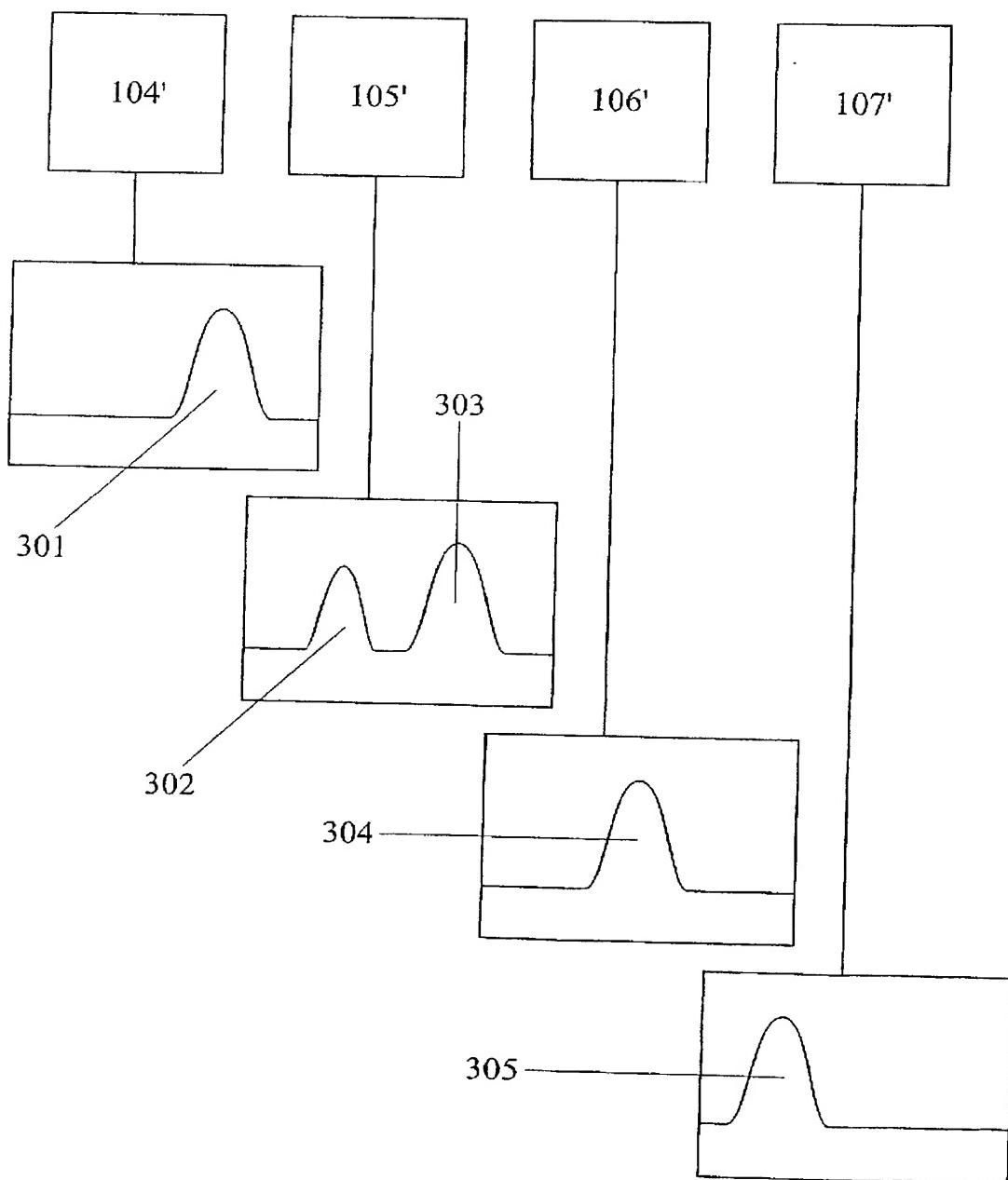
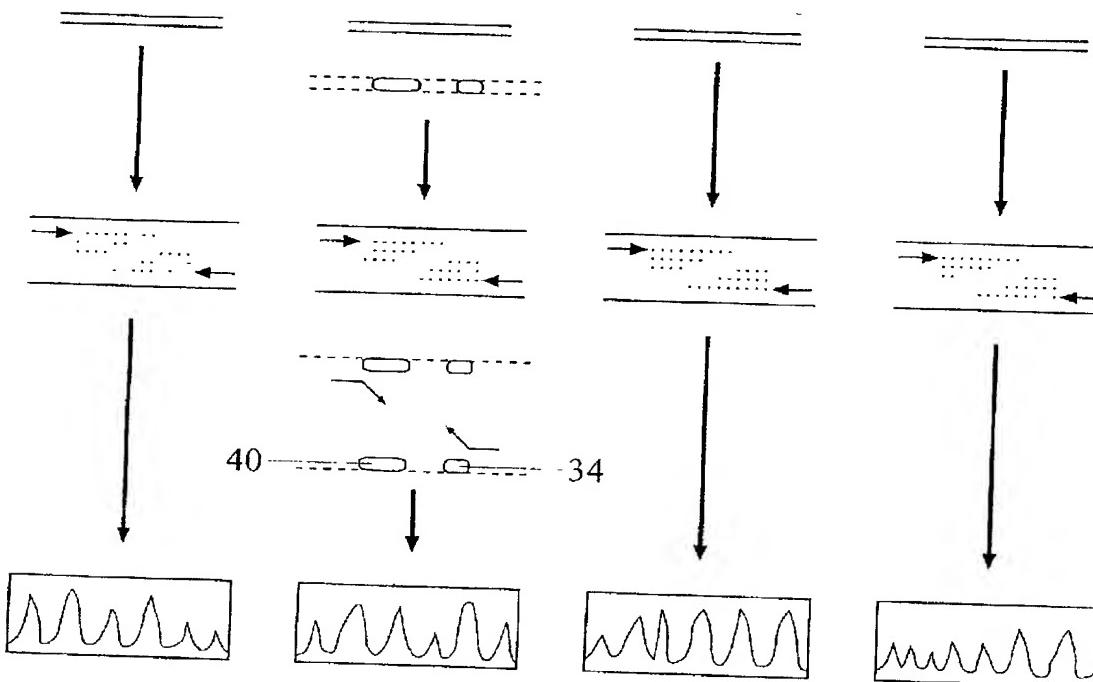


FIG. 3C

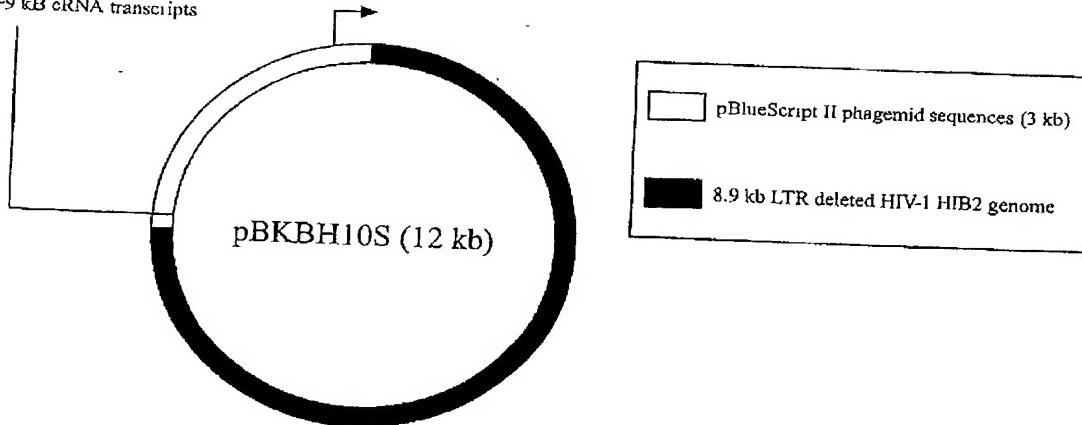


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**FIG. 3D**

Not I restriction site for linearizing pBKBH10S for production of ~9 kb cRNA transcripts

T7 Promoter - used by T7 RNA polymerase to transcribe sense strand HIV-1 RNA sequences.
+1

**FIG. 4**



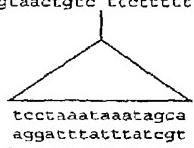
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5' to 3' direction of HIV-1 sense sequence →

RT562F-A primer (for sequencing)

RT558F primer (for RT-PCR)

5' aaaaagttaaacaaatggccatgtacag aaaaaaaaaaaaaaggcatttagtagaaaaatttgcacagagatggaaaagga 3' base pairs
 3' ttttcaatttttttaccggtaactgtc ttcttttttttttcgtaatcatctttaaacatgtctctacctttct 5' 2606 to 2680



16 bp insertion added between nucleotides 2631 and 2632.
 The four terminal 3' nucleotides sequencing primer RT562F-A do not hybridize to sequences in the insert.

FIG. 5

5' to 3' direction of HJV-1 sense sequence →

gg → cc
cc 3007/8 gg

Mutagenesis of nucleotides 3007 and 3008 to prevent primer extension of RT959R sequencing primer

5' tcagtacaatgtgtttcacaggat gg aaaggatcaccaatattccaaaggatgc base pairs
 3' agtcatgttacacgaagggtgtcccta cc ttccctagtgttgtataagggtttoatcg 2981 to 3038

RT964-2-R primer (for RT-PCR)

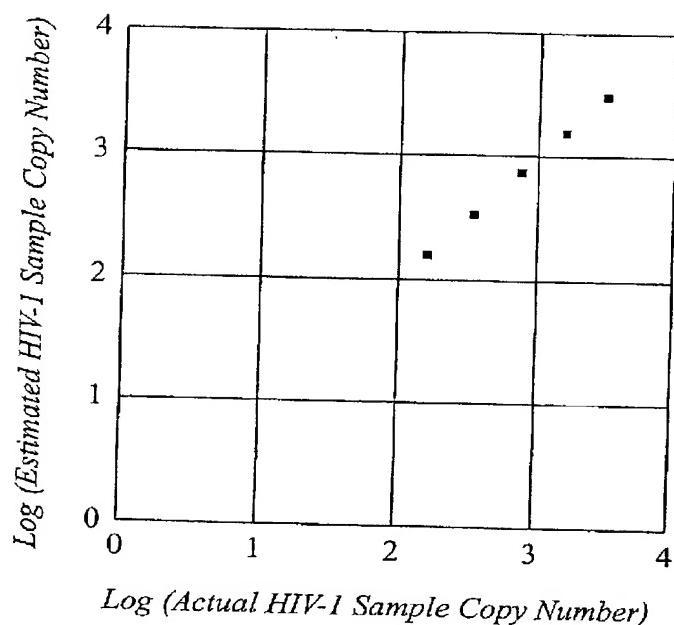
RT959R primer (for sequencing)

FIG. 6



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Estimated vs. Actual HIV-1 Sample Copy Number



Regression Statistics

slope: 1.060750
error of slope: 0.032348
y-Int.: -0.204487
error of y-Int.: 0.094912
x mean: 2.903090
y mean: 2.874965
x Std. Dev.: 0.475971
y Std. Dev.: 0.505588
R value: 0.998612

FIG. 7